

Policy interventions to improve rural retention among neurosurgeons in Iran: A discrete choice experiment

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Abstract

Background: Health workforce shortages in rural and remote areas are a global challenge that almost every health system has to deal with. This study aimed to discover neurosurgeons' job preferences and propose policy interventions that could possibly increase their retention in rural, remote, or underserved areas.

Methods: A discrete choice experiment (DCE) was conducted in November 2014 with a sample of Iranian neurosurgeons selected from five contrary's provinces representing the geographical diversity. Job attributes included income, dual practice opportunities, workload, proximity to family, clinical infrastructure, housing, educational facilities, and work location. Probit regression model was used to estimate the importance of different job attributes and examine the extent to which neurosurgeons were willing to tradeoff between monetary and nonmonetary attributes.

Results: Findings indicated that increased salary, permission to undertake dual practice and access to

adequate clinical infrastructure were the most important retention policies. Provision of subsidized housing and educational facilities also increased neurosurgeons' attraction and retention in rural areas.

Conclusion: A range of policy interventions focusing on both monetary and nonmonetary incentives are required to increase neurosurgeons' retention in rural, remote, or underserved areas.

Introduction

Inequitable distribution of physicians between large metropolitan cities and remote or noncapital areas has become a serious concern and a priority to deal with.^{1,2} Despite being a universal concern,^{3,4} low and middle income countries made great efforts to give a best possible answer to the question of how to attract physicians and improve their retention in underserved areas.^{5,6} World Health Organization (WHO) has identified 16 retention strategies, including regulation and compulsory policies, financial motivations, education and training, personal and job-related support plans.⁷ All around the world different policies have been developed to cope with uneven distribution of physicians. Some were related to monetary incentives⁸ and some